

A) Remarks:**Request for Withdrawal of Office Action:****I. Basis of rejection improper**

Applicant respectfully requests that the Office action of January 14, 2005 be withdrawn and a new Office Action be issued because claims 23 and 32 have been improperly rejected under 103(a).

Specifically, the Examiner rejected dependent claim 23 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,327,161 to Logan and U.S Patent 5,936,555 to Zagnoev. It is noted, however, that claim 23 depends from claim 6, which was rejected by the Examiner using U.S Patent 5,327,161 to Logan and U.S Patent 5,805,144 to Scholder. The prior art rejection is unclear when the Examiner rejects claim 6 using Logan and Scholder and then rejects dependent claim 23 using Logan and Zagnoev.

Additionally, the Examiner rejected dependent claim 32 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,973,622 to Chiang in view of U.S Patent 5,327,161 to Logan and further in view of U.S. Patent 5,473,347 to Collas et al. It is noted, however, that claim 32 depends from claim 6, which was rejected by the Examiner using U.S Patent 5,327,161 to Logan and U.S Patent 5,805,144 to Scholder. The prior art rejection is unclear when the Examiner rejects claim 6 using Logan and Scholder and then rejects dependent claim 32 using Chiang in view of Logan and further in view of Collas et al.

Accordingly, it is unclear as to the Examiner's basis for rejection of claims 23 and 32, and an incorrect Office action has been issued to Applicant. Applicant is unclear how to respond to the prior art rejection of claims 23 and 32 when the claims are rejected incorrectly. Applicant requests that the Office action of January 14, 2005 be withdrawn and a new Office Action be issued to afford the Applicant a fair opportunity to respond to a proper rejection.

II. Request for supporting reference

Applicant respectfully requests that the Office action of January 14, 2005 be withdrawn and a new Office Action be issued because the Examiner did not grant the Applicant's timely request for a reference to support the Examiner's statement with respect to claim 29 that a mechanical mouse button with a backlit area capable of illumination used to indicate to the user that the highlighting mode has been activated.

Specifically, the Examiner made the well-known statement for the first time in the Office Action mailed December 5, 2003, and the Applicant requested a supporting reference in the

response filed March 15, 2004 and again in the response files August 6, 2004. Applicant continues to traverse the Examiner's well-known assertion and continues to request that the Examiner provide documentary evidence supporting that a mechanical mouse button with a backlit area capable of illumination and used to indicate to the user that the highlighting mode has been activated is well-known, as alleged.

Response to Claim Rejections:

1. Claims 1-10, 12, 21, 22, 24-29, 31, 33, and 34 have been rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of U.S. Patent No. 5,327,161 to Logan et al. and U.S. Patent No. 5,805,144 to Scholder et al.

- **Specifically regarding the rejection of claim 1:**

It appears from the Final Office Action of January 14, 2005 that the Examiner is maintaining the same position with respect to some of the limitations of claim 1 over Logan et al. presented in the previous Office Action of May 11, 2004. The Examiner, however, did not address all of the limitations with respect to claim 1 in the current rejection. It is also noted that the Examiner failed to address the limitation of **"invoking a highlighting mode without physical movement of said mouse system housing."**

Claim 1 recites, **said handheld computer mouse system further comprising a handheld computer mouse system housing for supporting said at least one mechanical mouse button.** It is noted that the entire touchpad device 20 (Figure 1A) or 50 (Figures 2A and 2B), shown and described by Logan et al., is the mouse system and does not include a **mouse system housing**. In contrast, Applicant's mouse system includes a **mouse system housing that houses and supports the at least one mechanical mouse button**.

Applicant's claim 1 specifically recites that the touch pad is **integrated into a cavity opening** of the mechanical mouse button and the integrated mechanical touch pad button is movably mounted in **said mouse system housing and is capable of independent movement relative to said mouse system housing to invoke a highlighting mode without physical movement**

of said mouse system housing. The entire Logan et al. touch pad device 20 must be moved (up/down) to invoke dragging. This means that the mouse system must be moved. Applicant's Claim 1 requires that the mouse system **NOT** be moved to invoke dragging. Further, the Logan et al. reference does not teach a handheld computer mouse system wherein the touch pad button is moved relative to a mouse system housing within which the touch pad button is mounted. Accordingly, the Logan et al. reference does not teach the claimed limitations.

The Examiner agreed and stated in the Final Office action "Logan does not teach integrating the mechanical button with a handheld mouse system." However, the Examiner has disregarded the other deficiencies of Logan et al. noted above.

The Examiner points to Scholder et al. to teach the deficiencies of Logan et al. and indicates that "Scholder teaches a handheld mouse system with touch pad ... the user does not need to reposition the mouse housing in order to reposition the screen cursor..." The Examiner then indicates that "one skilled in the art could combine the two inventions by placing Logan's touch pad/mouse button with complete physical mouse as taught by Logan on column 3, lines 8-28 and column 2, lines 14-29..." The Examiner indicates, "it would have been obvious to place Logan's touch pad/button onto the mouse disclosed by Scholder."

However, it is not the intention of Scholder et al. to use mechanical mouse buttons. Scholder et al. specifically teach "a mouse device having a distinct contrast to the mouse pointing devices of the prior art ... in which simple momentary switches are provided...contact is either established (by depressing the switches) or not (by releasing the switches)." (see column 3, lines 32-37). Scholder et al. teach the use of a mechanism surface with virtual buttons replacing prior art buttons (column 4, lines 20-25 and 59-61). Scholder et al. also discuss at column 7, lines 1-5 that the mechanism surface replaces the prior art momentary buttons. Thus, Scholder et al. teach away from the use of mechanical buttons. These statements by Scholder et al. alone teach that Scholder et al. is not interested in using prior art mechanical

buttons and the teachings of the invention of Scholder et al. do not incorporate use of mechanical buttons. Therefore, it would not have been obvious to have incorporated mechanical buttons in the invention of Scholder et al., as the Examiner suggests, because Scholder et al. specifically teach not using mechanical buttons. Scholder et al. do not teach the combination of mechanical mouse buttons with touch pads.

It is noted that Applicant's claim 1 recites that the mouse system includes a mouse system housing that houses and supports the at least one mouse button. The housing of Scholder et al. is not designed to house or support mechanical mouse buttons. It is not the intention of Scholder et al. to use mechanical buttons. Additionally, Applicant's claim 1 recites the touch pad is integrated into a cavity opening of the mechanical mouse button and the integrated mechanical touch pad button is movably mounted in said mouse system housing. The reference of Scholder et al. does not teach or suggest providing for mechanical touch pad buttons that can be movably mounted in the housing. As noted previously, it is the intention of Scholder et al. to replace mechanical mouse buttons of the prior art.

Further evidence as to why the pointing device Logan et al. and the pointing device of Scholder et al. cannot be combined is that each clearly functions differently to perform operations. Applicant's Claim 1 recites that the touch pad button is movably mounted in said mouse system housing and is capable of independent movement relative to said mouse system housing to invoke a highlighting mode without physical movement of said mouse system housing. The Scholder et al. reference teaches "(1) a mouse body adapted to traverse a substantially planar surface, (2) a mouse movement tracking mechanism, coupled to the mouse body, for producing movement data regarding movement of the mouse body relative to the substantially planar surface..." (see Abstract; column 3, lines 17-22). Scholder et al. recite that "*The mouse 140 is adapted to traverse the surface of a mousepad 141...Traversal of the mousepad 141 and pressure on the upper surface 142 generate control signals that travel through the mouse cord 143 to a mouse connector* (see column 5, lines 61-67). Scholder et al.

disclose *“...demarcations defining virtual buttons on the mechanism surface...when the user contacts a virtual button, the communications and control circuitry interprets the contact as a depression of the virtual button.”* (see column 4, lines 20-26). Scholder et al. also discuss at column 5, lines 60-67 *“The mouse is adapted to traverse the surface of a mouse pad 141.”* Further, the user can selectively enter information by placing pressure on an upper surface 142 of the mouse 140. *Traversal of the mousepad 141 and pressure on the upper surface 142 generate control signals that travel through the mouse cord 143 to a mouse connector...*” Accordingly, it is clear from the discussion of Scholder et al. that the virtual buttons that are used to replace the mechanical buttons of the prior art function in the same way and, in similar fashion, are used in conjunction with mouse movement across a surface to perform operations, such as pointing and dragging. Therefore, the Scholder et al. reference teaches mouse movement to perform operations. Scholder et al. also teach the relationship between movement of the mouse body 210 over a planar surface 310 and user contact with the touch pad surface 220. Scholder et al. recite, *“Again, the mouse pointing device...200 comprises a mouse body 210 adapted to traverse a substantially planar surface 310. A rolling ball 322 is coupled to the mouse body 210 and transmits movement data regarding movement of the mouse body 210 relative to the substantially planar surface 310 to communication and control circuitry 340...A substantially planar mechanism surface 220 occupies a portion of a surface 211 of the mouse body 210. The mechanism surface 220 is a portion of the user position tracking mechanism 330. The user position tracking mechanism transmits contact data regarding contact between the mechanism surface 220 and the user to the communications and control circuitry 340.”* (see column 7, lines 14-29). Scholder et al. further state *“The communication and control circuitry 340 comprises temporary storage and serial transmission circuitry for sampling and holding the movement and contact data received from the mouse movement tracking mechanism 320 and the user position tracking mechanism 330...The data are transmitted to general purpose data processing and*

storage circuitry 350...adapted to execute a driver program designed to decode and...make the movement and contact data available to application programs..." (see column 7, lines 29-48).

The Examiner indicates in referencing Scholder et al., "The user does not need to reposition the mouse housing in order to reposition the cursor."

Actually, in contrast, Scholder et al. teach a mouse body that traverses a planar surface in conjunction with touch pad contact by the user to provide usable information for application programs. This is a distinct difference from what Applicant is claiming. Specifically, Applicant's claims do not make use of physical movement of the mouse to invoke a highlighting mode. It is also noted here that Scholder et al. do not recite performing the highlighting function or that the mouse is capable of performing this function or that there is the intention to perform this function. The mouse of Scholder et al. certainly would not be capable of performing such an operation without movement of the mouse across a substantially planar surface. Recall that Applicant's claim 1 recites without physical movement of said mouse system housing. It is noted from Applicant's Specification that the highlighting mode is used for highlighting text on which an operation is to be performed and the highlighting operation is achieved without movement of the mouse across a surface. In fact, the instant invention does not require movement of the mouse across a surface for performing any operation. The mouse system housing of the instant invention remains stationary before, during, and after performing any operation.

Further, Logan et al. provides no reason or motivation to modify the invention of Scholder et al. Logan et al. also requires movement of the mouse system in an up/down fashion. It would not have been obvious to have incorporated a mechanical button into the mouse of Scholder et al., as the Examiner has suggested, for the following reasons:

First: because Scholder et al. specifically teach away from using mechanical buttons. The Scholder et al. reference does not use mechanical buttons or provide for their inclusion. Such inclusion of mechanical buttons in the pointing device of Scholder et al. would destroy

the invention and teachings of Scholder et al. Additionally, Logan et al. teach a pointing device lacking mechanical buttons, as claimed.

Second: because neither reference teaches a touch pad button that is movably mounted in said mouse system housing and is capable of independent movement relative to said mouse system housing. Neither of the references used to reject the claim 1 teach a touch pad button movably mounted in mouse system housing. Neither of the references used to reject the claim 1 teach a mechanical touch pad button capable of independent movement relative to a mouse system housing. Only Scholder et al. teach a mouse system housing, but teaches away from using mechanical buttons and therefore the Scholder et al. device does not lend itself to the mounting of mechanical buttons or modification as the Examiner has done.

Third: because neither reference teaches without physical movement of said mouse system housing. Both Logan et al. and Scholder et al. teach mouse-pointing devices that require movement of the entire mouse system for performing certain functions – specifically, the highlighting function. The Logan et al. mouse system is manipulated with an up/down movement and the Scholder et al. mouse system is manipulated by moving it over a planar surface. In contrast, Applicant's mouse system housing does not use or require movement to interact or perform any functions.

Fourth: because the pointing devices of Scholder et al. and Logan et al. function differently to perform operations. The Scholder et al. device requires use of virtual buttons in conjunction with mouse movement and the Logan et al. device requires up/down movement in conjunction with touch pad use.

Accordingly, neither reference meets the limitations of claim 1 alone or in combination. For these reasons, Applicant submits that Logan et al. in combination with Scholder et al. do not suggest or make obvious the subject matter of claim 1. Accordingly, the Examiner has not shown that the product of the combination of Scholder et al. and Logan et al. is structurally and

functionally the same as Applicant's claimed product and the Examiner is requested to withdraw this rejection and allow the claim.

• **Specifically regarding the rejection of claim 2:**

The rejection of claim 2 should be withdrawn because neither of the Scholder et al. and Logan et al. references teach the limitations of the combination of claims 1 and 2. Applicant's claim 2 recites that the **at least one mechanical mouse button is a press button**. Claim 1 recites that the mechanical mouse button **is movably mounted in said mouse system housing and is capable of independent movement relative to said mouse system housing**. Neither of the references cited, alone or in combination teach a **mechanical mouse button that is a press button movably mounted in said mouse system housing and is capable of independent movement relative to said mouse system housing**. The Logan et al. reference does not teach this limitation. The Logan et al. reference does not teach

- 1) a mouse system housing for housing and supporting a mechanical mouse button.
- 2) a mechanical mouse button that moves relative to a mouse housing to invoke a highlighting mode without physical movement of the mouse housing.

Therefore the touch pad device 20 of Logan et al. is not capable of independent movement relative to a mouse system housing, as claimed by Applicant. The Scholder et al. reference teaches away from using mechanical buttons and therefore the Scholder et al. device does not lend itself to the mounting of mechanical buttons.

The Examiner appears to be reading each claim independently and not considering the limitations of the corresponding independent claims. Accordingly, the combination of Scholder et al. and Logan et al. is improper and it would not have been obvious to have combined the references as the Examiner has suggested.

For these reasons, Applicant submits that Logan et al. in combination with Scholder et al. do not suggest or make obvious the subject matter of claim 2.

Accordingly, the Examiner has not shown that the product of the combination of Scholder et al. and Logan et al. is structurally and functionally the same as Applicant's claimed product and the Examiner is requested to withdraw this rejection and allow the claim.

- **Specifically regarding the rejection of claims 3 and 4:**

The Examiner has indicated in the rejection that Logan et al. "understands that the press button can be of several types well known in the art (column 3, lines 65-66)."

However, contrary to the Examiner's assertion, this statement or suggestion is not present in the Logan et al. reference. While Logan et al. disclose a touch pad device 20 and a drag button 58, any type of button structure design would not be functional in Logan et al. The Logan et al. reference is specific in the type of button design 58 and function to be used (drag button 58 is moved up and down), because it functions properly in the Logan et al. invention. There is no suggestion in the Logan et al. reference that the disclosed touch pad device design 20 is open to modification or replacement with buttons that function differently or that are manipulated differently. In fact, the sliding panel button claimed by Applicant is actually excluded as an equivalent in the Logan et al. reference because the functionality of the Logan et al. mouse would not function as described and claimed by Logan et al. if a sliding panel were to replace drag button 58. Such a suggestion by the Examiner to the contrary broadens the scope of the Logan et al. patent to include subject matter not taught, conceived, or intended by Logan et al. patent. It must be shown that the prior art could be modified and there exists a suggestion of the desirability or motivation for making the modification. Logan et al. do not provide this suggestion, motivation, or desire. Nor, does the scope of the Logan et al. patent lend itself to modification. The Logan et al. reference is specific in the type of touch pad device design and type that will function in the Logan et al. invention. Further, any modification of Logan et al. does not correct the deficiencies of the combination or Logan et al. with Scholder et al. in which Scholder et al.

teach away from the use of mechanical buttons and therefore the Scholder et al. reference does not lend itself to the mounting of mechanical buttons. Accordingly, the references are not combinable.

Therefore, it would not have been obvious to have modified the Logan et al. reference as suggested by the Examiner. Accordingly, the Examiner cannot rely on Logan et al. for motivation to modify. Further, the Logan et al. reference does not overcome the deficiencies with regard to claim 1. Accordingly, the rejection of claims 3 and 4 should be withdrawn for the reasons stated above and also with respect to claim 1, as claims 3 and 4 depend directly from claim 1.

For these reasons, Applicant submits that Logan et al. in combination with Scholder et al. do not suggest or make obvious the subject matter of claims 3 and 4. Accordingly, the Examiner has not shown that the product of the combination of Scholder et al. and Logan et al. is structurally and functionally the same as Applicant's claimed product and the Examiner is requested to withdraw this rejection and allow the claims.

- **Specifically regarding the rejection of claim 5:**

Applicant's claim 5 requires that **the mechanical mouse button have at least one finger-pressing device formed thereon for application of pressure for causing movement of said at least one mechanical mouse button relative to said mouse system housing.**

The Examiner recites in the rejection "*By inherency that press button is triggered from the application of pressure.*"

However, it is unclear to Applicant how this statement meets the structural limitation of claim 5 of **at least one finger-pressing device formed on the mechanical mouse button for application of pressure for causing movement of said at least one mechanical mouse button relative to said mouse system housing.** It is noted that the Logan et al. reference does not teach a finger-pressing device formed on the touch pad device 20, but rather teaches pressing on the screen 54 (see column 4, lines 1-2). The rejection of claim 5 should be withdrawn. It is further noted in Logan et al. at column 3,

line 67 through column 4, line 2 that the operator presses on screen 54 to initiate dragging. Applicant recognizes that continued pressure applied to the touch pad results in damage and has provided finger-pressing devices when applying pressure to the touch pad buttons.

The Examiner's allegation that the capability limitations recited for the mechanical mouse button are inherent is not supported because there exists no teaching for a finger pressing device in the Logan et al or the Scholder et al. references.

The rejection of claim 5 provided by the Examiner also does not provide a statement as to why the limitations are inherent.

The Scholder et al. reference also fails to teach finger-pressing devices for application of pressure for causing movement of said at least one mechanical mouse button because Scholder et al. teach away from using prior art mechanical buttons.

For these reasons, Applicant submits that Logan et al. in combination with Scholder et al. do not suggest or make obvious the subject matter of claim 5. Accordingly, the Examiner has not shown that the product of the combination of Scholder et al. and Logan et al. is structurally and functionally the same as Applicant's claimed product and the Examiner is requested to withdraw this rejection and allow the claim.

• **Specifically regarding the rejection of claim 6:**

It appears from the Final Office Action of January 14, 2005 that the Examiner is maintaining the same position with respect to some of the limitations of claim 6 over Logan et al. that were presented in the previous Office Action of May 11, 2004. However, the Examiner did not address all of the limitations with respect to claim 6 in the current Office Action. It is also noted that the Examiner failed to address the limitation of **"to invoke a highlighting mode without physical movement of said mouse housing."**

The limitations of claim 6 recite **"auxiliary computer mouse comprises a computer mouse housing supporting at least one mechanical mouse button, and at least one touch pad, said mechanical mouse button being**

movably mounted within said mouse housing and capable of independent movement relative to said mouse housing to invoke a highlighting mode without physical movement of said mouse housing.”

The entire Logan et al. touch pad device 20 must be moved (up/down) to invoke dragging. This means that the mouse system must be moved. Claim 6 requires that the mouse system **NOT** be moved. Further, the Logan et al. reference does not teach a handheld computer mouse system wherein a mechanical button is moved relative to a mouse system housing within which the touch pad button is mounted. Logan et al. do not teach a housing. Accordingly, the Logan et al. reference does not teach the claimed limitations.

The Logan et al. reference does not teach the limitations of claim 6. The Logan et al. reference does not teach:

- 1) a mouse system housing for housing and supporting a mechanical mouse button and touch pad;
- 2) a mechanical mouse button that moves independently of a mouse housing to invoke a highlighting mode without physical movement of the mouse housing.

For these reasons, Applicant submits that Logan et al. do not teach the claimed subject matter of claim 6.

The Examiner stated with agreement in the Final Office action “Logan does not teach integrating the mechanical button with a handheld mouse system.” However, the Examiner has disregarded the other deficiencies of Logan et al. noted above.

The Examiner points to Scholder et al. to teach the deficiencies of Logan et al. and indicates that “*Scholder teaches a handheld mouse system with touch pad ... the user does not need to reposition the mouse housing in order to reposition the screen cursor...*” The Examiner then indicates that “*one skilled in the art could combine the two inventions by placing Logan’s touch pad/mouse button with complete physical mouse as taught by Logan on column 3, lines 8-28 and column 2, lines 14-29...*” The Examiner indicates, “*it would have been obvious to place Logan’s touch pad/button onto the mouse disclosed by Scholder.*”

The reference of Scholder et al. does not teach or suggest providing for mechanical buttons that can be movably mounted in the housing. As noted previously, it is the intention of Scholder et al. to replace mechanical mouse buttons of the prior art.

Further evidence as to why the pointing device Logan et al. and the pointing device of Scholder et al. cannot be combined is that each clearly functions differently to perform operations. Applicant's Claim 6 recites that the **said mechanical mouse button being mounted within said mouse housing and capable of independent movement relative to said mouse housing to invoke a highlighting mode without physical movement of said mouse housing**. These limitations clearly define over Logan et al. and Scholder et al. as to why the two references cannot be combined. The Scholder et al. reference teaches *"(1) a mouse body adapted to traverse a substantially planar surface, (2) a mouse movement tracking mechanism, coupled to the mouse body, for producing movement data regarding movement of the mouse body relative to the substantially planar surface..."* (see Abstract; Column 3, lines 17-22). Scholder et al. recite that *"The mouse 140 is adapted to traverse the surface of a mousepad 141...Traversal of the mousepad 141 and pressure on the upper surface 142 generate control signals that travel through the mouse cord 143 to a mouse connector* (see column 5, lines 61-67). Scholder et al. disclose *"...demarcations defining virtual buttons on the mechanism surface...when the user contacts a virtual button, the communications and control circuitry interprets the contact as a depression of the virtual button."* (see column 4, lines 20-26). Scholder et al. also discuss at column 5, lines 60-67, *"The mouse is adapted to traverse the surface of a mouse pad 141. Further, the user can selectively enter information by placing pressure on an upper surface 142 of the mouse 140. Traversal of the mousepad 141 and pressure on the upper surface 142 generate control signals that travel through the mouse cord 143 to a mouse connector..."* Accordingly, it is clear from the discussion of Scholder et al. that the virtual buttons that are used to replace the mechanical buttons of the prior art function in the same way and, in similar fashion, are used in

conjunction with mouse movement across a surface to perform operations, such as pointing and dragging. Therefore, the Scholder et al. reference teaches mouse movement to perform operations. Scholder et al. also teach the relationship between movement of the mouse body 210 over a planar surface 310 and user contact with the touch pad surface 220. Scholder et al. recite, *“Again, the mouse pointing device...200 comprises a mouse body 210 adapted to traverse a substantially planar surface 310. A rolling ball 322 is coupled to the mouse body 210 and transmits movement data regarding movement of the mouse body 210 relative to the substantially planar surface 310 to communication and control circuitry 340...A substantially planar mechanism surface 220 occupies a portion of a surface 211 of the mouse body 210. The mechanism surface 220 is a portion of the user position tracking mechanism 330. The user position tracking mechanism transmits contact data regarding contact between the mechanism surface 220 and the user to the communications and control circuitry 340.”* (see column 7, lines 14-29). Scholder et al. further state *“The communication and control circuitry 340 comprises temporary storage and serial transmission circuitry for sampling and holding the movement and contact data received from the mouse movement tracking mechanism 320 and the user position tracking mechanism 330...The data are transmitted to general purpose data processing and storage circuitry 350...adapted to execute a driver program designed to decode and...make the movement and contact data available to application programs...”* (see column 7, lines 29-48).

The Examiner indicates in referencing Scholder et al., *“The user does not need to reposition the mouse housing in order to reposition the cursor.”*

Actually, in contrast, Scholder et al. teach a mouse body that traverses a planar surface in conjunction with touch pad contact by the user to provide usable information for application programs. This is a distinct difference from what Applicant is claiming. Specifically, Applicant's claims do not make use of physical movement of the mouse to invoke a highlighting mode. It is also noted here that Scholder et al. do not recite performing the highlighting function or that the mouse is capable of performing this function or that there

is the intention to perform this function. The mouse of Scholder et al. certainly would not be capable of performing such an operation without movement of the mouse across a substantially planar surface. Recall that Applicant's claim 6 recites without physical movement of said mouse housing. It is noted from Applicant's Specification that the highlighting mode is used for highlighting text on which an operation is to be performed and the highlighting operation is achieved without movement of the mouse across a surface. In fact, the instant invention does not require movement of the mouse across a surface for performing any operation.

Further, Logan et al. provide no reason or motivation to modify the invention of Scholder et al. Logan et al. also require movement of the mouse system. It would not have been obvious to have incorporated a mechanical button into the mouse of Scholder et al., as the Examiner has suggested, for the following reasons:

First: because Scholder et al. specifically teach away from using mechanical buttons. The Scholder et al. reference does not use mechanical buttons or provide for their inclusion. Such inclusion of mechanical buttons in the pointing device of Scholder et al. would destroy the invention and teachings of Scholder et al. Additionally, Logan et al. teach a pointing device lacking mechanical buttons, as claimed.

Second: because neither reference teaches a touch pad button mounted in said mouse system housing.

Third: neither of the references used to reject the claim 6 teach a mechanical mouse button movably mounted in mouse system housing. Neither of the references used to reject the claim 6 teach a mechanical mouse button capable of independent movement relative to a mouse system housing. Only Scholder et al. teach a mouse system housing, but teaches away from using mechanical buttons and therefore does not lend itself to the mounting of mechanical buttons or modification as the Examiner has done.

Fourth: because neither reference teaches without physical movement of said mouse housing. Both Logan et al. and Scholder et al. teach mouse-pointing devices that require movement of the entire mouse system for performing certain functions – specifically, the highlighting function. The Logan et al. mouse system is manipulated with an up/down movement and the Scholder et al. mouse system is manipulated by moving it over a planar surface. In contrast, Applicant's mouse system housing does not use or require movement to interact or perform any functions.

Fifth: because the pointing devices of Scholder et al. and Logan et al. function differently to perform operations. The Scholder et al. device requires use of virtual buttons in conjunction with mouse movement and the Logan et al. device requires up/down movement in conjunction with touch pad use.

Accordingly, neither reference meets the limitations of claim 6 alone or in combination. For these reasons, Applicant submits that Logan et al. in combination with Scholder et al. do not suggest or make obvious the subject matter of claim 6. Accordingly, the Examiner has not shown that the product of the combination of Scholder et al. and Logan et al. is structurally and functionally the same as Applicant's claimed product and the Examiner is requested to withdraw this rejection and allow the claim.

• **Specifically regarding the rejection of claim 7:**

The rejection of claim 7, which depends from claim 6, should be withdrawn because the Logan et al. reference does not teach the limitations of the combination of claims 6 and 7. Applicant's claim 7 recites that **the at least one mechanical mouse button is a press button**. Claim 6 recites that **the mechanical mouse button is movably mounted in said mouse housing and capable of independent movement relative to said mouse housing**. Neither the Logan et al. reference or the Scholder et al. reference teach a mechanical mouse button that is a press button movably mounted in said

mouse housing and capable of independent movement relative to said mouse housing.

The Logan et al. and Scholder et al. references fail to teach the limitations of the combination of claims 6 and 7. The Logan et al. reference does not teach:

- 1) a mouse system housing for housing and supporting a mechanical mouse button;
- 2) a mechanical mouse button that moves relative to a mouse housing to invoke a highlighting mode without physical movement of the mouse housing.

The Scholder et al. reference teaches away from the use of mechanical buttons and, therefore, the Scholder et al. reference does not lend itself to the mounting of mechanical buttons. Accordingly, the combination of Scholder et al. with Logan et al. is improper and it would not have been obvious to have combined the references as suggested by the Examiner.

For these reasons, Applicant submits that Logan et al. in combination with Scholder et al. do not suggest or make obvious the subject matter of claim 7. Accordingly, the Examiner has not shown that the product of the combination of Scholder et al. and Logan et al. is structurally and functionally the same as Applicant's claimed product and the Examiner is requested to withdraw this rejection and allow the claim.

• **Specifically regarding the rejection of claims 8 and 9:**

The Examiner has indicated in the rejection that Logan et al. "understands that the press button can be of several types well known in the art (column 3, lines 65-66)."

However, contrary to the Examiner's assertion, this statement or suggestion is not present in the Logan et al. reference. While Logan et al. disclose a touch pad device 20 and a drag button 58 located under the device 20, any type of button structure design would not be functional in Scholder et al. because Scholder et al. teach away from using mechanical buttons and, therefore, the Scholder et al. reference does not lend itself to the mounting of

mechanical buttons. The Logan et al. reference is specific in the type of button design 58 and function to be used (moved up and down), because it functions properly in the Logan et al. invention. There is no suggestion in the Logan et al. reference that the disclosed touch pad device design 20 is open to modification or replacement with buttons that function or that are manipulated differently. The sliding panel button claimed by Applicant is actually excluded as an equivalent in the Logan et al. reference because the functionality of the Logan et al. mouse device would not function as described and claimed by Logan et al. Such a suggestion otherwise broadens the scope of the Logan et al. patent to include subject matter not taught, conceived, or intended by the Logan et al. patent. It must be shown that the prior art could have been modified and that there exists a suggestion of the desirability or motivation for making the modification. Logan et al. do not provide this suggestion, motivation, or desire. Nor, does the scope of the Logan et al. patent lend itself to modification. The Logan et al. reference is specific in the type of touch pad device design and type that will function in the Logan et al. invention. Further, any modification of Logan et al. does not correct the deficiencies of the combination of Logan et al. and Scholder et al. in which Scholder et al. teaches away from the use of mechanical buttons.

Therefore, it would not have been obvious to have modified the Logan et al. reference as suggested by the Examiner. Accordingly, the Examiner cannot rely on Logan et al. for motivation to modify. Further, the Logan et al. reference does not overcome the deficiencies with regard to claim 6, from which claims 8 and 9 depend. Accordingly, the rejection of claims 8 and 9 should be withdrawn for the reasons stated above and also with respect to claim 6, as claims 8 and 9 depend directly from claim 6.

For these reasons, Applicant submits that the Logan et al. reference in combination with the Scholder et al. reference does not suggest or make obvious the subject matter of claims 8 and 9. Accordingly, the Examiner has not shown that the product of the combination of Scholder et al. and Logan et al. is structurally and functionally the same as Applicant's claimed product and the Examiner is requested to withdraw this rejection and allow the claims.

• **Specifically regarding the rejection of claim 10:**

It appears from the Final Office Action of January 14, 2005 that the Examiner is maintaining the same position with respect to some of the limitations with respect to claims 6 and 10 (which depends from claim 6) over Logan et al. presented in the previous Office Action of May 11, 2004. However, the Examiner did not address all of the limitations with respect to claims 6 and 10 in the current Office Action. It is also noted that the Examiner failed to address the limitation of **“to invoke a highlighting mode without physical movement of said mouse housing.”**

The rejection of claim 10 should be withdrawn because the Logan et al. reference does not teach the limitations of the combination of claims 6 and 10.

Claim 10 recites, **said at least one touch pad is integrated into a cavity opening formed in said at least one mechanical mouse button.**

The limitations of claim 6 specify that the **auxiliary computer mouse comprises a computer mouse housing supporting at least one mechanical mouse button, and at least one touch pad, said mechanical mouse button being movably mounted within said mouse housing and capable of independent movement relative to said mouse housing to invoke a highlighting mode without physical movement of said mouse housing.**

The Logan et al. reference does not teach the limitations of claims 6 or 10. The Logan et al. reference does not teach:

- 1) a mouse housing for housing and supporting a movably mounted mechanical mouse button having an integrated touch pad.
- 2) the mechanical mouse button moves independently of the mouse housing to invoke a highlighting mode without physical movement of the mouse housing.

The Scholder et al. reference teaches away from using mechanical buttons and, therefore, the Scholder et al. reference does not lend itself to the mounting of mechanical buttons. Accordingly, the combination of Scholder et al. with Logan et al. is improper and it would not have been obvious to have combined the references as the Examiner has suggested.

For these reasons, Applicant submits that the combination of Scholder et al. with Logan et al. do not suggest or make obvious the subject matter of claims 6 and 10. Accordingly, the Examiner has not shown that the product of the combination of Scholder et al. and Logan et al. is structurally and functionally the same as Applicant's claimed product and the Examiner is requested to withdraw this rejection and allow the claims.

• **Specifically regarding the rejection of claim 12:**

It appears from the Final Office Action of January 14, 2005 that the Examiner is maintaining the same position with respect to some of the limitations of claims 6 and 12 (which depends from claim 6) over Logan et al. presented in the previous Office Action of May 11, 2004. However, the Examiner did not address all of the limitations with respect to claims 6 and 12 in the current rejection. It is also noted that the Examiner failed to address the limitation of **“to invoke a highlighting mode without physical movement of said mouse housing.”**

The rejection of claim 12 should be withdrawn because the Logan et al. reference does not teach the combination of claims 6 and 12. Specifically, claim 12 recites that **“said computer mouse housing is separate from a central processing unit housing and separate from a keyboard housing.”**

The limitations of claim 6 specify that the **“auxiliary computer mouse comprises a computer mouse housing supporting at least one mechanical mouse button, and at least one touch pad, said mechanical mouse button being movably mounted within said mouse housing and capable of independent movement relative to said mouse housing to invoke a highlighting mode without physical movement of said mouse housing.”**

The Logan et al. reference does not teach the limitations of the combination of claims 6 and 12. The Logan et al. reference does not teach:

- 1) a mouse housing for housing and supporting a movably mounted mechanical mouse button.

- 2) the mechanical mouse button moves independently of the mouse housing to invoke a highlighting mode without physical movement of the mouse housing.

The Scholder et al. reference teaches away from using mechanical buttons and, therefore, the Scholder et al. reference does not lend itself to the mounting of mechanical buttons. Accordingly, the combination of Scholder et al. with Logan et al. is improper and it would not have been obvious to have combined the references as the Examiner has suggested.

For these reasons, Applicant submits that the combination of Scholder et al. and Logan et al. do not suggest or make obvious the claimed subject matter of claims 6 and 12. Accordingly, the Examiner has not shown that the product of the combination of Scholder et al. and Logan et al. is structurally and functionally the same as Applicant's claimed product and the Examiner is requested to withdraw this rejection and allow the claims.

- **Specifically regarding the rejection of claims 21 and 22:**

The Examiner has rejected claims 21 and 22 by indicating "the limitations placed on these claims are inherent to the type of buttons listed." However, Applicant disagrees.

The Examiner first rejected the limitations of claim 4, from which claim 21 depends, as being obvious choices for substitution and then rejects the capability limitations of claim 21 as inherent based on the type of button chosen without considering how the choice would function in the Logan et al. reference. Additionally, the Examiner has not shown, with respect to claim 21, a sliding panel button capable of being displaced forward, backward, sideways, or diagonally from an initial position. It is improper for the Examiner to take the position that the functional limitations to the sliding panel button are inherent in the Logan et al. reference because a sliding panel button is not recited in the Logan et al. reference. In fact, the sliding panel button claimed by Applicant is actually excluded as an equivalent in the Logan et al. patent because the functionality of the Logan et al. mouse device would not function as described and claimed by Logan et al. should a sliding

panel button replace button 58. Therefore, the capability limitations recited for the sliding panel button **are not inherent** and cannot be inherent because there exists no teaching for a sliding panel button in Logan et al.

The rejection of claim 21 provided by the Examiner also does not provide a statement of explanation as to why the limitations are inherent.

Additionally, the Examiner has not shown or addressed **a pivot means** for the limitation of claim 22, where claim 22 depends from claim 3.

The Scholder et al. reference teaches away from using prior art mechanical buttons.

The rejection of claims 21 and 22 should be withdrawn because the Logan et al. reference in combination with the Scholder et al. reference does not teach the combination of claims 1, 3, and 22 or the combination of claims 1, 4, and 21. Specifically, claim 1 recites, **“said handheld computer mouse system further comprising a handheld computer mouse system housing for supporting said at least one mechanical mouse button.”** It is noted that the entire touch pad device 20 (Figure 1A) or 50 (Figures 2A and 2B), shown and described by Logan et al., is the mouse system and does not include a **mouse system housing supporting said at least one mechanical mouse button**. In contrast, Applicant’s claimed mouse system includes a **mouse system housing that houses and supports said at least one mechanical mouse button**.

Applicant’s claim 1 specifically recites that the touch pad is **integrated into a cavity opening** of the mechanical mouse button and the mechanical touch pad button is movably mounted in **said handheld mouse system housing and is capable of independent movement relative to said mouse system housing to invoke a highlighting operation without physical movement of said mouse system housing**. The entire Logan et al. touch pad device 20 must be moved to invoke dragging. The Logan et al. reference does not teach a handheld computer mouse system wherein a touch pad button is moved relative to a mouse housing in which the touch pad button is mounted. Accordingly, the Logan et al. reference does not teach the claimed limitations.

For these reasons, Applicant submits that Logan et al. in combination with Scholder et al. do not make obvious the claimed subject matter of claim 22 in combination with claims 1 and 3. Applicant submits that Logan et al. in combination with Scholder et al. do not make obvious the claimed subject matter of claim 21 in combination with claims 1 and 4.

Accordingly, the Examiner has not shown that the product of the combination of Scholder et al. and Logan et al. is structurally and functionally the same as Applicant's claimed product and the Examiner is requested to withdraw this rejection and allow the claims.

• **Specifically regarding the rejection of claim 24:**

It appears from the Final Office Action of January 14, 2005 that the Examiner is maintaining the same position with respect to some of the limitations of claims 1 and 24 (which depends from claim 1) over Logan et al. presented in the previous Office Action of May 11, 2004. However, the Examiner did not address all of the limitations with respect to claims 1 and 24 in the current Office Action. It is also noted that the Examiner failed to address the limitation of **“invoking a highlighting mode without physical movement of said mouse system housing.”**

The Examiner rejected claim 24 in the previous Office Action by indicating “It is obvious that Logan's invention sets out to prevent the need to drastically reposition the mouse in order to move the mouse cursor (column 1, lines 10-15).”

There is no specific mention as to how combining the two references meets the limitations of claim 24. It is further unclear how by merely “placing” or stacking the mouse pointing device of Logan et al. onto the mouse of Scholder et al. provides any benefit or how it would even function. The Examiner is directed to the discussion of claim 1 above, from which claim 24 depends, which provides clear explanation as to why the Logan et al. and Scholder et al. references cannot be combined.

Further evidence as to why the Logan et al. and Scholder et al. cannot be combined is that each clearly functions differently to perform operations.

Applicant's claim 24 requires that **the handheld computer mouse system manipulates and relocates a screen cursor without physical movement or repositioning of said handheld mouse system housing.** These limitations clearly define over Logan et al. and Scholder et al. as to why the two references cannot be combined.

Scholder et al. teach moving the mouse in combination with use of the "virtual buttons." Specifically, Scholder et al. disclose "...*demarcations defining virtual buttons on the mechanism surface...When the user contacts a virtual button, the communications and control circuitry interprets the contact as a depression of the virtual button.*" (see column 4, lines 20-26). Scholder et al. also discuss at column 5, lines 60-67, "*The mouse is adapted to traverse the surface of a mouse pad 141. Further, the user can selectively enter information by placing pressure on an upper surface 142 of the mouse 140. Traversal of the mousepad 141 and pressure on the upper surface 142 generate control signals that travel through the mouse cord 143 to a mouse connector...*" Accordingly, it is clear from the discussion of Scholder et al. that the virtual buttons that are used to replace the prior art mechanical buttons function in the same way and, similarly, are used in conjunction with mouse movement to perform operations, such as pointing and dragging.

Additionally, the rejection of claim 24 should be withdrawn because the Logan et al. and Scholder et al. references do not teach the combination of claims 1 and 24. Specifically, claim 1 recites, "**said handheld computer mouse system further comprising a handheld computer mouse system housing for supporting said at least one mechanical mouse button.**" It is noted that the entire touch pad device 20 (Figure 1A) or 50 (Figures 2A and 2B), shown and described by Logan et al., is the mouse system and does not include a mouse system housing. In contrast, Applicant's mouse system includes a **mouse system housing that houses and supports the mouse button.**

Applicant's claim 1 specifically recites that the touch pad is **integrated into a cavity opening** of the mechanical mouse button and the mechanical touch pad button is movably mounted in **said handheld mouse system**

housing and is capable of independent movement relative to said mouse system housing to invoke a highlighting mode without physical movement of said mouse system housing. The entire Logan et al. touch pad device 20 must be moved to invoke dragging. The Logan et al. reference does not teach a handheld computer mouse system wherein the touch pad button is moved relative to a mouse housing within which the touch pad button is mounted. Likewise, the Scholder et al. reference discloses that dragging and pointing operations are performed by movement of the mouse housing. Accordingly, the combination of Scholder et al. and Logan et al. references do not teach the claimed limitations.

For these reasons, Applicant submits that Logan et al. in combination with Scholder et al. do not suggest or make obvious the claimed subject matter of claim 24. Accordingly, the Examiner has not shown that the product of the combination of Scholder et al. and Logan et al. is structurally and functionally the same as Applicant's claimed product and the Examiner is requested to withdraw this rejection and allow the claim.

• **Specifically regarding the rejection of claim 25:**

It appears from the Final Office Action of January 14, 2005 that the Examiner is maintaining the same position with respect to some of the limitations of claims 1 and 25 (which depends from claim 1) over Logan et al. presented in the previous Office Action of May 11, 2004. However, the Examiner did not address all of the limitations with respect to claims 1 and 25 in the current Office Action. It is also noted that the Examiner failed to address the limitation of **“invoking a highlighting mode without physical movement of said mouse system housing.”**

The Examiner rejected claim 25 in the previous Office Action by indicating **“It can be seen from Figures 2A and 2B that the touch pad and button will always maintain contact during push button implementations.”**

There is no specific mention as to how combining the two references meets the limitations of claim 25. It is further unclear how by merely “placing” or stacking the mouse pointing device of Logan et al. onto the

mouse of Scholder et al. would provide any benefit or how it would even function. The Examiner is directed to the discussion of claim 1 above, from which claim 25 depends, which provides clear explanation as to why the Logan et al. and Scholder et al. references cannot be combined.

The limitations of claim 25 require that **at least one wall forming said cavity opening in said mechanical mouse button remains in a face-to-face relationship with at least one wall of the touch pad during manipulation of said at least one mechanical mouse button.** The Examiner has not addressed this limitation in the rejection. Nowhere in the rejection does the Examiner explain how the combination of Logan et al. and Scholder et al. meets this limitation. The Logan et al. and Scholder et al. references do not show or teach this limitation. Neither of the references, either alone or in combination, teaches or makes obvious the limitations of claim 25.

The Scholder et al. reference teaches away from using mechanical buttons and, therefore, the Scholder et al. reference does not lend itself to the mounting of mechanical buttons. Accordingly, the combination of Scholder et al. with Logan et al. is improper and it would not have been obvious to have combined the references as the Examiner has suggested.

Further, Applicant's claim 1 recites, **said mechanical mouse button being movably mounted in said mouse system housing.** It is noted that the entire touch pad device 20 (Figure 1A) or 50 (Figures 2A and 2B), shown and described by Logan et al., is the mouse system and does not include a mouse system housing. Accordingly, the device 20 shown and described by Logan et al. is not movably mounted within an opening of a mouse system housing. In contrast, Applicant's mouse system includes a **mouse system housing that houses and supports the mouse button.** This limitation is specifically required in claim 1, from which claim 25 depends. Likewise, Scholder et al. teach away from using mechanical buttons and therefore does not lend itself to the mounting or use of mechanical buttons.

Accordingly, Applicant's claimed product is structurally different from that of Logan et al. in combination with Scholder et al. For these reasons, Applicant submits that Logan et al. in combination with Scholder et al. do not

suggest or make obvious the subject matter of claim 25. Accordingly, the Examiner has not shown that the product of the combination of Scholder et al. and Logan et al. is structurally and functionally the same as Applicant's claimed product and the Examiner is requested to withdraw this rejection and allow the claim.

- **Specifically regarding the rejection of claim 26:**

It appears from the Final Office Action of January 14, 2005 that the Examiner is maintaining the same position with respect to some of the limitations of claims 6 and 26 (which depends from claim 6) over Logan et al. presented in the previous Office Action of May 11, 2004. However, the Examiner did not address all of the limitations with respect to claims 6 and 26 in the current Office Action. It is also noted that the Examiner failed to address the limitation of **"to invoke a highlighting mode without physical movement of said mouse housing."**

The Examiner rejected claim 26 in the previous Office Action by indicating *"It is obvious that Logan's invention sets out to prevent the need to drastically reposition the mouse in order to move the mouse cursor (column 1, lines 10-15)."*

There is no specific mention in the rejection as to how combining the two references meets the limitations of claim 26. It is further unclear how by merely "placing" or stacking the mouse pointing device of Logan et al. onto the mouse of Scholder et al. could provide any benefit or how the result would even function. The Examiner is directed to the discussion of claim 6 above, from which claim 26 depends, which provides clear explanation as to why the Logan et al. and Scholder et al. references cannot be combined.

Further evidence as to why the mouse devices of Logan et al. and Scholder et al. cannot be combined is that each clearly functions differently to perform operations. Applicant's claim 26 requires that **the auxiliary computer mouse system functions to point and reposition a screen cursor without physical movement of said mouse housing**. These limitations clearly define over Logan et al. and Scholder et al. as to why the two references cannot be

combined. Scholder et al. teach moving the mouse in combination with use of “virtual buttons.” Specifically, Scholder et al. disclose “...*demarcations defining virtual buttons on the mechanism surface...When the user contacts a virtual button, the communications and control circuitry interprets the contact as a depression of the virtual button.*” (see column 4, lines 20-26). Scholder et al. also discuss at column 5, lines 60-67, “*The mouse is adapted to traverse the surface of a mouse pad 141. Further, the user can selectively enter information by placing pressure on an upper surface 142 of the mouse 140. Traversal of the mousepad 141 and pressure on the upper surface 142 generate control signals that travel through the mouse cord 143 to a mouse connector...*” Accordingly, it is clear from the discussion of Scholder et al. that the virtual buttons that are used to replace the prior art mechanical buttons function in the same way and, in similar fashion, are used in conjunction with mouse movement to perform operations, such as pointing and dragging. Therefore, the Scholder et al. reference teaches mouse housing movement.

Additionally, the rejection of claim 26 should be withdrawn because the Logan et al. and Scholder et al. references do not teach the combination of claims 6 and 26. Specifically, claim 6 recites, **a computer mouse housing supporting at least one mouse button, and at least one touch pad, said mechanical mouse button being movably mounted within said mouse housing**. It is noted that the entire touch pad device 20 (Figure 1A) or 50 (Figures 2A and 2B), shown and described by Logan et al., is the mouse system and does not include a mouse system housing. In contrast, Applicant’s mouse system includes a **mouse system housing that houses and supports the mechanical mouse button**.

Applicant’s claim 6 recites **said mechanical mouse button being movably mounted within said mouse housing and capable of independent movement relative to said mouse housing to invoke a highlighting mode without physical movement of said mouse housing**. The entire Logan et al. touch pad device 20 must be moved to invoke dragging. The Logan et al. reference does not teach a handheld computer mouse system wherein the mechanical mouse button is moved relative to a mouse housing within which

the touch pad button is mounted. Likewise, the Scholder et al. reference discloses that dragging and pointing operations are performed by movement of the mouse housing. Accordingly, the Logan et al. reference in combination with the Scholder et al. references does not teach the claimed limitations.

For these reasons, Applicant submits that Logan et al. in combination with Scholder et al. do not suggest or make obvious the claimed subject matter of claims 6 and 26. Accordingly, the Examiner has not shown that the product of the combination of Scholder et al. and Logan et al. is structurally and functionally the same as Applicant's claimed product and the Examiner is requested to withdraw this rejection and allow the claim.

• **Specifically regarding the rejection of claim 27:**

It appears from the Final Office Action of January 14, 2005 that the Examiner is maintaining the same position with respect to some of the limitations of claims 1 and 27 (which depends from claim 1) over Logan et al. presented in the previous Office Action of May 11, 2004. The Examiner, however, did not address all of the limitations with respect to claims 1 and 27 in the current Office Action. It is also noted that the Examiner failed to address the limitation of **“invoking a highlighting mode without physical movement of said mouse system housing.”**

The Examiner rejected claim 27 in the previous Office Action by indicating “It is obvious that Logan's invention sets out to prevent the need to drastically reposition the mouse in order to move the mouse cursor (column 1, lines 10-15).”

There is no specific mention by the Examiner as to how combining the two references of Logan et al. and Scholder et al. meets the limitations of claim 27. It is further unclear how by merely “placing” or stacking the mouse pointing device of Logan et al. onto the mouse device of Scholder et al. could provide any benefit or how the result would even function. The Examiner is directed to the discussion of claim 1 above, from which claim 27 depends, which provides clear explanation as to why the Logan et al. and Scholder et al. references cannot be combined.

Applicant's claim 1 recites said mechanical mouse button being movably mounted within said mouse housing and capable of independent movement relative to said mouse housing to invoke a highlighting mode without physical movement of said mouse housing. The entire Logan et al. touch pad device 20 must be moved up/down to invoke dragging. The Logan et al. reference does not teach a handheld computer mouse system wherein the mechanical mouse button is moved relative to a mouse housing within which the touch pad button is mounted. Likewise, the Scholder et al. reference discloses that dragging and pointing operations are performed by movement of the mouse housing and also teaches away from using mechanical buttons. Accordingly, the Logan et al. reference in combination with the Scholder et al. reference do not teach the claimed limitations.

For these reasons, Applicant submits that Logan et al. in combination with Scholder et al. do not suggest or make obvious the claimed subject matter of claims 1 and 27. Accordingly, the Examiner has not shown that the product of the combination of Scholder et al. and Logan et al. is structurally and functionally the same as Applicant's claimed product and the Examiner is requested to withdraw this rejection and allow the claim.

• **Specifically regarding the rejection of claim 28:**

It appears from the Final Office Action of January 14, 2005 that the Examiner is maintaining the same position with respect to some of the limitations of claims 1 and 28 over Logan et al. presented in the previous Office Action of May 11, 2004. The Examiner did not address all of the limitations with respect to claims 1 and 28 (which depends from claim 1) in the current Office Action. It is also noted that the Examiner failed to address the limitation of "invoking a highlighting mode without physical movement of said mouse system housing."

The Examiner rejected claim 28 in the previous Office Action by indicating "It can be seen from Figures 2A and 2B that the touch pad and button will always maintain contact during push button implementations."

However, this statement does not address the claim 28 limitation of **said at least one mechanical mouse button and said at least one touch pad are adapted to move together in a desired direction relative to said computer mouse system housing**

Logan et al. provides a touch pad device 50 having a switch button 58 located on its bottom surface. When the screen 54 is pressed down, the mechanical switch 58 moves up (opposite direction as the touch pad device 50). As described by Logan et al. at column 3, line 67 through column 4, line 1 and Figure 2A, *“mechanical switch 58 moves in the direction of arrow 61 when screen 54 is pressed down.”* The Logan et al. switch 58 moves in an opposite direction to screen 54 – not in the same direction, as Applicant has claimed. The Logan et al. reference does not met the claimed limitations.

Further, Claim 1 recites, **said handheld computer mouse system further comprising a handheld computer mouse system housing for supporting said at least one mechanical mouse button.** It is noted that the entire touchpad device 20 (Figure 1A) or 50 (Figures 2A and 2B), shown and described by Logan et al., is the mouse system and does not include a **mouse system housing**. In contrast, Applicant’s mouse system includes a **mouse system housing that houses and supports the at least one mechanical mouse button.**

The Scholder et al. reference teaches away from using mechanical buttons and, therefore, the Scholder et al. reference does not lend itself to the mounting of mechanical buttons. Accordingly, the combination of Scholder et al. with Logan et al. is improper and it would not have been obvious to have combined the references as the Examiner has suggested.

For these reasons, Applicant submits that Logan et al. reference in combination with Scholder et al. do not teach, suggest, or make obvious the Limitations of claim 28. Accordingly, the Examiner has not shown that the product of the combination of Scholder et al. and Logan et al. is structurally and functionally the same as Applicant’s claimed product and the Examiner is requested to withdraw this rejection and allow the claim.

- **Specifically regarding the rejection of claim 29:**

In the rejection of claim 29, the Examiner indicated, “...backlighting a button after it has been pressed is a feature that is well known in the art. It would have been obvious to include a light to inform the user of the button being pushed.”

However, the prior art references to Scholder et al. in view of Logan et al. do not teach the alleged mechanical mouse button with a touch pad **including a backlit area capable of illumination used to indicate to the user that the highlighting mode has been activated.** The Examiner is requested to specifically indicate what part of the structure of the combined references is being relied upon to teach a “backlit area.” The Examiner indicates in the Office action that backlighting a button after it has been pressed is a feature that is well known in the mouse art. Regardless of whether this allegation is correct or not, which Applicant believes is not correct, the Examiner has not **first** met the claimed structural limitation of a mechanical mouse touch pad button having a backlit area. If a structural backlit area has not been provided to begin with, then the functional claim limitation of the backlit area being illuminated during the highlighting mode cannot be met.

The Examiner is relying on Logan et al. and Scholder et al. and arbitrarily adding features to the combination that were never suggested, intended, or disclosed by either of the references.

The Examiner was requested in Applicant’s response March 15, 2004 and Applicant’s response of August 6, 2004 to provide a reference supporting the statement that it is well known to **backlight a mechanical mouse button having an integrated touch pad in the cavity opening of a mechanical mouse button and is illuminated during the highlighting mode.** The Applicant again requests a reference that supports the Examiner’s position that this claim limitation is well known.

For these reasons, Applicant submits that the Logan et al. and Scholder et al. references do not suggest or make obvious the claimed subject matter of claim 29. Accordingly, the Examiner has not shown that the product of the combination of Scholder et al. and Logan et al. is structurally and functionally

the same as Applicant's claimed product and the Examiner is requested to withdraw this rejection and allow the claim.

- **Specifically regarding the rejection of claim 31:**

The Examiner has rejected claim 31 by indicating, "the original Scholder et al. invention allow of such a modification of having a touch pad, not on the top of a mechanical button."

It is noted that the Scholder et al. reference does not use mechanical buttons and, in fact, teaches away from using mechanical buttons. Therefore, the Scholder et al. reference cannot possibly teach what the Examiner alleges. It is also noted that claim 6, from which claim 31 depends, was rejected by the combination of Logan et al. and Scholder et al. It is unclear how the Examiner is now combining the references. The Examiner did not provide an obvious statement, suggesting the desirability of making the modification.

The limitations of claim 31 recite, **at least one touch pad integrated into an area of said auxiliary computer mouse housing separate from said mechanical mouse button.** The Logan et al. reference does not teach this limitation. The Logan et al. reference is deficient because it does not teach a housing structure for supporting at least one mechanical mouse button and at least one touch pad – accordingly there is no housing structure for placement of a touch pad separate from a mechanical mouse button, as claimed by Applicant. In the mouse device of Logan et al., the switch button 58 and touch screen 54 are not separate. The Scholder et al. reference teaches away from using mechanical mouse buttons. Neither of the Logan et al. reference or the Scholder et al. reference teaches a mouse auxiliary housing supporting a mechanical mouse button separate from the mouse pad. Additionally, Applicant's mouse housing structure is not physically manipulated in any way to start or end a computer function, as are the pointing devices taught by Logan et al. and Scholder et al.

For these reasons, Applicant submits that Logan et al. and Scholder et al. references do not suggest or make obvious the limitations of claim 31. Accordingly, the Examiner has not shown that the product of the combination

of Scholder et al. and Logan et al. is structurally and functionally the same as Applicant's claimed product and the Examiner is requested to withdraw this rejection and allow the claim.

• **Specifically regarding the rejection of claim 33:**

It appears from the Final Office Action of January 14, 2005 that the Examiner is maintaining the same position with respect to some of the limitations of claim 1 and 33 (which depends from claim 1) over Logan et al. presented in the previous Office Action of May 11, 2004. The Examiner, however, did not address all of the limitations with respect to claims 1 and 33 in the current Office Action. It is also noted that the Examiner failed to address the limitation of **"invoking a highlighting mode without physical movement of said mouse system housing."**

The Examiner rejected the claim 33, in the previous Office Action, indicating *"...the touch pad and button wall always maintain contact during push button implementations."*

However, the limitation does not require that the touch pad and button maintain contact, but that **at least one wall forming said cavity opening in the mechanical mouse button is in a face-to-face relationship with at least one wall of the touch pad.** Figures 2A and 2B of Logan et al., or the discussion thereof, do not show this structural limitation.

Additionally, Scholder et al. teaches away from using mechanical mouse buttons.

Additionally, claim 1 recites **said handheld computer mouse system further comprising a handheld mouse system housing for supporting said at least one mechanical mouse button.** It is noted that the entire touchpad device 20 (Figure 1A) or 50 (Figures 2A and 2B), shown and described by Logan et al., is the mouse system and does not include a mouse system housing. In contrast, Applicant's mouse system includes a **mouse system housing that houses and supports the at least one mechanical mouse button.**

Applicant's claim 1 specifically recites that the touch pad is integrated into a cavity opening of the mechanical mouse button and the mechanical touch pad button is movably mounted in said system housing and is capable of independent movement relative to said mouse system housing to invoke a highlighting mode without physical movement of said mouse system housing. The entire Logan et al. touch pad device 20 must be moved to invoke dragging. The Logan et al. reference does not teach a handheld computer mouse system wherein the touch pad button is moved relative to a mouse housing within which the touch pad button is mounted. Accordingly, the Logan et al. reference does not teach the claimed limitations.

For these reasons, Applicant submits that the combination of Logan et al. with Scholder et al. is not combinable and that the references, either alone or in combination, fail to meet the subject matter of claim 1 in combination with claim 33. Accordingly, the Examiner has not shown that the product of the combination of Scholder et al. and Logan et al. is structurally and functionally the same as Applicant's claimed product and the Examiner is requested to withdraw this rejection and allow the claim.

• **Specifically regarding the rejection of claim 34:**

It appears from the Final Office Action of January 14, 2005 that the Examiner is maintaining the same position with respect to some of the limitations of claims 1 and 34 (which depends from claim 1) over Logan et al. presented in the previous Office Action of May 11, 2004. The Examiner, however, did not address all of the limitations with respect to claims 1 and 34 in the current Office Action. It is also noted that the Examiner failed to address the limitation of "invoking a highlighting mode without physical movement of said mouse system housing."

The limitations of claim 34 specify that at least one wall of the touch pad extends into the cavity opening.

The Examiner rejected claim 34, indicating in the previous Office Action, "...the touch pad and button wall always maintain contact during push button implementations."

However, the limitation does not require that the touch pad and button 58 maintain contact, but that **at least one wall of the touch pad extends into the cavity opening**. Figures 2A and 2B of Logan et al., or the discussion thereof, do not show this claimed structural limitation.

It is also noted that the entire touch pad device 20 (Figure 1A) or 50 (Figures 2A and 2B), shown and described by Logan et al., is the mouse system and does not include a mouse system housing as recited in claim 1, from which claim 34 depends. In contrast, Applicant's mouse system includes a **mouse system housing that houses and supports the at least one movably mounted mouse button**. It is further noted that Scholder et al. teach away from using mechanical mouse buttons.

For these reasons, Applicant submits that the Scholder et al. and Logan et al. references do not teach or make obvious the claimed limitations of claim 1 in combination with claim 34. Accordingly, the Examiner has not shown that the product of the combination of Scholder et al. and Logan et al. is structurally and functionally the same as Applicant's claimed product and the Examiner is requested to withdraw this rejection and allow the claim.

2. **Claims 11 and 30 have been rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Logan et al. U.S. Patent No. 5,327,161 and Scholder et al. U.S. Patent No. 5,805,144 in view of U.S. Patent No. 5,530,455 to Gillick et al.**

• **Specifically regarding the rejection of claim 11:**

The limitations of claim 11 specify that **the touch pad is integrated into a cavity opening formed in a sidewall of the auxiliary computer mouse housing**.

The Examiner has cited Gillick et al. as teaching a side button 25 on a computer mouse as being equivalent to a touch pad, as claimed by Applicant. However, the button 25 of Gillick et al. is not equivalent to a touch pad. Further, the Gillick et al. reference does not at all address the use of a touch pad. Additionally, Logan et al. do not teach use of a touch pad integrated into a cavity opening formed in a sidewall of the computer mouse housing. In fact,

Logan et al. do not teach a mouse housing. While both Logan et al. and Gillick et al. teach using mechanical buttons, Scholder et al. teach away from using mechanical mouse buttons. Accordingly, the references are not combinable.

In contrast, Applicant's invention includes a housing structure for accommodating the button/touch pad – the Logan et al. reference does not include a housing structure. Applicant's mouse housing structure is not physically manipulated in any way to start or end a computer function. However, the pointing devices taught by Logan et al. and Gillick et al. and Scholder et al. must be physically moved.

Additionally, the side button 25 of Gillick et al. invention is used to perform a scrolling function (see column 5, lines 1-2; column 8, lines 11-13). Applicant's invention is concerned with a touch pad. The Gillick et al. invention *“relates to computer pointing devices, such as mice and track balls”* (see column 1, lines 5-10, column 2, lines 47-48). Accordingly, the Gillick et al. mouse must be picked-up, moved, or repositioned across a surface to perform highlighting operations or positioning of a screen cursor. The Logan et al. reference also requires mouse device movement (up/down) to perform highlighting operations. The Scholder et al. mouse device also requires movement to perform highlighting functions and also relates to the use of a mouse track ball 322. Accordingly, the pointing devices of Logan et al., Scholder et al., and Gillick et al. all be moved to perform operations.

By using the teachings of Gillick et al., it appears that the Examiner is indicating that it would have been obvious to add a mechanical button on the side housing of the combination of Scholder et al. and Logan et al. However, the claim limitations recite a touch pad. Further, recall that Scholder et al. teach away from using mechanical buttons. Thus, the references are not combinable and the claim limitation has not been met.

Therefore, it would not have been obvious to have included a touch pad or a button in a sidewall cavity of the computer mouse in the combination of Logan et al. and Scholder et al. because:

- 1) Neither the Logan et al. reference or the Gillick et al. reference teaches use of a touch pad in a sidewall cavity, as claimed. The Logan et al. reference is deficient because it does not teach a housing structure for supporting at least one mechanical mouse button and at least one touch pad – accordingly there is no housing structure for placement of a touch pad as claimed by Applicant. The Gillick et al. reference never suggests using a touch pad. In fact, the Gillick et al. reference “*relates to computer pointing devices, such as mice and track balls*” (see column 1, lines 5-10; column 2, lines 47-48), which teaches away from the intention of the Logan et al. reference which notes that “*Touchpad input devices ... used to replace the mouse cursor locator/input device.*” (see column 1, lines 18-21). Accordingly, the teachings of Logan et al. are to replace known mouse cursor locator/input devices, such as those taught by Gillick et al. It is also noted that the computer mouse of the instant invention, as recited in claim 6 (from which claim 11 depends), said a mechanical mouse button being movably mounted within said mouse housing and capable of independent movement relative to said mouse housing to invoke a highlighting mode without physical movement of the mouse housing. Because the Gillick et al. reference “*relates to computer pointing devices, such as mice and track balls*” (see column 1, lines 5-10; column 2, lines 47-48), physical movement of the pointing device is necessary and teaches away from Applicant’s invention.
- 2) Logan et al. and Scholder et al. do not require the use of a scrolling button, as taught by Gillick et al. Accordingly, it would not have been obvious to have provided the mouse device taught by Logan et al. or Scholder et al. with an unnecessary scrolling button. There simply is no motivation.
- 3) Logan et al. *do not teach* a mouse housing structure. Applicant’s claim recites a computer mouse housing supporting at least one mechanical mouse button and at least one touch pad. The Logan et al. reference is deficient because it does not teach a housing structure

for supporting at least one mechanical mouse button and at least one touch pad – accordingly there is no housing structure for integration of a touch pad in a sidewall of said auxiliary computer mouse housing, as claimed by Applicant.

For these reasons, Applicant submits that the combination of Scholder et al., Logan et al., and Gillick et al. does not suggest or make obvious the limitations of claim 11. Accordingly, the Examiner has not shown that the product of the combination of Scholder et al., Logan et al., and Gillick et al. is structurally and functionally the same as Applicant's claimed product and the Examiner is requested to withdraw this rejection and allow the claim.

• **Specifically regarding the rejection of claim 30:**

The limitations of claim 30 specify that **the mouse button is integrated into a cavity opening formed in a topwall of the computer mouse housing and the touch pad is integrated into a sidewall of the auxiliary computer mouse housing and adapted to be manipulated with a thumb of a user.**

The Examiner has cited Gillick et al. as teaching a side button 25 on a computer mouse as being equivalent to a touch pad and/or a computer mouse button. However, the button 25 of Gillick et al. is not equivalent to a touch pad. Further, the Gillick et al. reference does not at all address the use of a touch pad.

Additionally, Logan et al. do not teach use of a touch pad integrated into a cavity opening formed in a sidewall of the computer mouse housing adapted to be manipulated with the thumb of the user. In contrast, Applicant's invention includes a housing structure for accommodating the mechanical mouse button and touch pad – the Logan et al. reference does not include a housing structure. Applicant's mouse housing structure is not physically manipulated in any way to start or end a computer function, as is the touch pad devices taught by Logan et al., Scholder et al., and Gillick et al.

Additionally, the side button 25 of Gillick et al. invention is used to perform a scrolling function (see column 5, lines 1-2; column 8, lines 11-13). The Gillick et al. invention *“relates to computer pointing devices, such as*

mice and track balls” (see column 1, lines 5-10, column 2, lines 47-48). Accordingly, the Gillick et al. mouse must be picked-up, moved, or repositioned across a surface to perform a highlighting operation or cause repositioning of a screen cursor. The Logan et al. reference also must be manipulated to invoke a highlighting mode by movement of the mouse device in an up/down manipulation. The Scholder et al. reference must also be moved across a surface to perform operations. Applicant’s mouse does not require movement to invoke the highlighting mode. Accordingly, the pointing devices of Logan et al., Scholder et al., and Gillick et al. all function differently from the instant invention.

Therefore, it would not have been obvious to have included a touch pad or a button in a sidewall cavity of the computer mouse of Logan et al. because:

- 1) Neither the Logan et al. reference nor the Gillick et al. reference teaches use of a touch pad in an area of the computer mouse housing adapted to be manipulated with the thumb of a user, as claimed. The Logan et al. reference is deficient because it does not teach a housing structure for supporting at least one mechanical mouse button and at least one touch pad – accordingly there is no housing structure for placement of a touch pad as claimed by Applicant.

The Gillick et al. reference never suggests using a touch pad. In fact, the Gillick et al. reference *“relates to computer pointing devices, such as mice and track balls”* (see column 1, lines 5-10; column 2, lines 47-48), which teaches away from the intention of the Logan et al. reference which notes that *“Touchpad input devices ... used to replace the mouse cursor locator/input device.”* (see column 1, lines 18-21). Accordingly, the teachings of Logan et al. are to replace known mouse cursor locator/input devices, such as those taught by Gillick et al.

It is also noted that the computer mouse of the instant invention, as recited in claim 6 (from which claim 30 depends), wherein said auxiliary computer mouse comprises a computer mouse housing supporting at least one mechanical mouse button, and at least one touch pad, said mechanical

mouse button being movably mounted within said mouse housing and capable of independent movement relative to said mouse housing to invoke a highlighting mode without physical movement of said mouse housing.

Because the Gillick et al. reference “*relates to computer pointing devices, such as mice and track balls*” (see column 1, lines 5-10, column 2, lines 47-48), physical movement of the pointing device is necessary and teaches away from Applicant’s invention.

Logan et al. do not teach a mouse housing structure. Applicant’s claim 30 recites **a mouse housing supporting at least one mechanical mouse button integrated into a cavity opening formed in a topwall of the mouse housing and at least one touch pad integrated into a sidewall of the auxiliary computer mouse housing.** The Logan et al. reference is deficient because it does not teach a housing structure for supporting at least one mechanical mouse button integrated into a cavity opening formed in a topwall of a mouse housing and at least one touch pad integrated into a sidewall of a mouse housing. In fact, there is no housing structure for placement of a touch pad and mouse button, as suggested by the Examiner.

The Scholder et al. reference teaches away from using prior art mechanical mouse buttons.

For these reasons, Applicant submits that the combination of Logan et al., Scholder et al., and Gillick et al. does not suggest or make obvious the subject matter of claim 30. Accordingly, the Examiner has not shown that the product of the combination of Scholder et al., Logan et al., and Gillick et al. is structurally and functionally the same as Applicant’s claimed product and the Examiner is requested to withdraw this rejection and allow the claim.

3. Claims 13-17 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Chiang U.S. Patent No. 5,973,622 in view of Logan et al. U.S. Patent No. 5,327,161.

• Specifically regarding the rejection of claims 13, 14, and 17:

The Examiner has rejected claims 13 and 17 indicating, *“Chiang’s invention includes a track ball, but not a track pad. As one skilled in the art understands, the two are essentially interchangeable input methods.”*

It is noted that the Examiner did not provide an obvious statement, but merely indicated that the parts were interchangeable. Further, it is unclear how Logan et al. is being used in the rejection. Also, the Examiner did not specifically address claim 14.

In response, Chiang teaches a keyboard with a two dimensional actuator for generating direction signals which can be used to move a cursor shown on a screen to a target position (see Abstract; column 1, lines 5-10). Chiang discloses that *“it is a primary object to provide a keyboard with a two-dimensional actuator to generate the same signals as those generated by the four directional or control keys of a traditional numerical key pad so that the function of these keys can be performed by activating the actuator directly”* (see column 2, lines 9-14 and 60-65). Chiang also discusses at column 1, lines 43-51 that *“some keyboards contain a trackball, touch pad...which permits the user to move a pointer shown on the screen...However, the signals generated by such a pointing device and the way to use such a pointing device are quite different from the four direction keys or the four control keys of the numerical keypad...Besides, the signals generated by such a traditional pointing device are used to move a pointer displayed on a screen instead of moving a cursor or scrolling a screen, like the four direction keys or the four control keys.”* The Chiang activator 20 and switch 40 are used to generate signals into predefined directional signals for moving a cursor to a target position or for performing “page up” or “page down” operations.

Accordingly, Chiang distinguishes a device different from the typical mouse or prior art pointing devices by the way the device is used, its design,

its function, and the type of signals it generates. Further, the Chiang device performs only specific functions and does not function as a mouse.

Therefore, it would not have been obvious to have interchanged a touch pad into the Chiang invention because Chiang teaches an invention unlike prior art pointing devices in the way that the device is used, its design, its function, and the type of signals it generates to perform its operations. Chiang's invention is not directed to mouse devices and does not function as a touch pad, as taught by Chiang.

Further, while the Examiner indicates that trackballs and touchpads are interchangeable, Chiang teaches that they are not. Merely because Chiang teaches using a track ball, it does not have equivalency to the prior art track balls and their specific functioning. Chiang's invention is not directed to mouse devices, as taught by Chiang.

Claim 13 also recites, **said mechanical mouse button capable of independent movement relative to said keyboard housing to invoke a highlighting mode**. The Examiner's rejection fails to discuss or meet this limitation. Neither the Chiang reference nor the Logan et al. reference recite or suggest this limitation.

The Logan et al. reference is not directed to, nor does it teach, auxiliary keyboard housings. In fact, the Logan et al. reference does not teach a mechanical mouse button capable of independent movement relative to a keyboard housing.

The Chiang invention is not concerned with mouse devices, nor can it perform the functions of a mouse device.

Claim 13 also recites, **said keyboard mouse manipulates and relocates a screen cursor without physical movement or repositioning of said keyboard housing or said mechanical mouse button**.

The Chiang reference is replete with passages that describe relocation of a screen cursor by using a track ball (actuator). Chiang recites, "*when the switch 40 is not being depressed by the actuator 20, the four predetermined directions of the actuator 20 are used to generate the four direction signals...and when the switch 40 is being pressed by actuator 20, the four*

predetermined directions are used to generate the four control signals of the four control keys...”

Accordingly, Chiang teaches that the actuator 20 trackball must be moved in a specific direction to move the cursor. Recall that Applicant’s mechanical mouse button relocates a screen cursor without physical movement of the mouse button (claim 13).

Claim 17 recites, said at least one touch pad is integrated into a cavity opening formed in said at least one mechanical mouse button. As indicated previously, the Chiang reference is not directed to mouse devices and teaches an invention unlike prior art pointing devices in the way that the device is used, its design, its function, and the type of signals it generates to perform its operations.

Therefore, it would not have been obvious to have interchanged a touch pad into the Chiang invention because Chiang teaches an invention unlike prior art pointing devices in the way that the device is used, its design, its function, and the type of signals it generates to perform its operations. Chiang’s invention is not directed to mouse devices, as taught by Chiang.

Neither Chiang nor Logan et al., alone or in combination, teach the limitations of claims 13 or 17. Accordingly, the Examiner has not shown that the product of the combination of Chiang and Logan et al. is structurally and functionally the same as Applicant’s claimed product and the Examiner is requested to withdraw this rejection and allow the claim.

• **Specifically regarding the rejection of claims 15 and 16:**

The Examiner indicates, “Claims 15 and 16 are rejected with the same reasoning presented in the rejection of claims 3 and 4.”

However, it is noted that the Chiang reference is not used in the rejection of claims 3 and 4. The basis of the rejection for claims 3 and 4 is different from the basis of the rejection of claims 15 and 16. Further, claims 3 and 4 depend from claim 1 and claims 15 and 16 depend from claim 13.

The Examiner has indicated in the rejection of claims 3 and 4 that Logan et al. “understands that the press button can be of several types well known in

the art (column 3, lines 65-66). It would have been obvious to one skilled in the art to choose a press and lock button or a sliding panel button as the preferred embodiment if such substitutions improved on the user friendliness of Logan's invention."

However, contrary to the Examiner's assertion, this statement or suggestion is not present in the Logan et al. reference. While Logan et al. disclose a touch pad device 20 and a drag button 58, any type of button structure design would not be functional in Chiang because Chiang is not directed to mouse devices and teaches an invention unlike prior art pointing devices in the way that the device is used, its design, its function, and the type of signals it generates to perform its operations. The Logan et al. reference is specific in the type of button design 58 and function to be used (drag button 58 is moved up and down), because it functions properly in the Logan et al. invention. There is no suggestion in the Logan et al. reference that the disclosed touch pad device design 20 is open to modification or replacement with buttons that function differently or that are manipulated differently. In fact, the sliding panel button claimed by Applicant is actually excluded as an equivalent in the Logan et al. reference because the functionality of the Logan et al. mouse would not function as described and claimed by Logan et al. if a sliding panel were to replace drag button 58. Such a suggestion inappropriately broadens the scope of the Logan et al. patent to include subject matter not taught, conceived, or intended by Logan et al. patent. It must be shown that the prior art could be modified and that there exists a suggestion of the desirability or motivation for making the modification. Logan et al. do not provide this suggestion, motivation, or desire. Nor, does the scope of the Logan et al. patent lend itself to modification. The Logan et al. reference is specific in the type of touch pad device design and type that will function in the Logan et al. invention. Further, any modification of Logan et al. does not correct the deficiencies of the combination of Chiang and Logan et al. in which Chiang is not directed to mouse devices. Accordingly, the references are not combinable.

Therefore, it would not have been obvious to have modified the Logan et al. reference or the Chiang reference as suggested by the Examiner. Accordingly, the Examiner cannot rely on Logan et al. for motivation to modify. Further, the Logan et al. reference does not overcome the deficiencies with regard to claim 13. Accordingly, the rejection of claims 15 and 16 should be withdrawn for the reasons stated above and also with respect to claim 13, as claims 15 and 16 depend directly from claim 13.

For these reasons, Applicant submits that Logan et al. in combination with the Chiang reference does not suggest or make obvious the subject matter of claims 15 and 16. Accordingly, the Examiner has not shown that the product of the combination of Chiang and Logan et al. is structurally and functionally the same as Applicant's claimed product and the Examiner is requested to withdraw this rejection and allow the claim.

- 4. Claims 18-20 and 32 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Chiang in view of Logan et al. U.S. Patent No. 5,327,161 and further in view of Collas et al. U.S. Patent No. 5,473,347.**

• **Specifically regarding the rejection of claim 18:**

The Examiner indicates in the rejection *"In reference to claims 18-20 and 32, teaches a system that resembles the claimed invention however he does not incorporate his invention into the sidewall of a keyboard."* It is not clear to Applicant to which reference(s) the Examiner is referring and what the references teach with respect to the claim limitations.

The Examiner also refers back to the rejection of claim 11 indicating *"Much like the reasoning offered in the rejection of claim 11, placing the mouse buttons on the sidewall of a computer keyboard is also very customary in the art."* It is noted the Examiner using the combination of Logan et al. and Scholder et al. in view of Gillick et al rejected claim 11. The basis of the rejection of claims 18-20 and 32 does not include Gillick et al. or Scholder et al. – only Chiang, Logan et al., and Collas et al. Further, claim 11 depends from claim 6, while claims 18-20 depend from claim 13 and claim 32 depends from claim 6.

It is further noted that the Examiner has not provided an obvious statement for using Chiang, Logan et al., and Collas et al. to reject claims 18-20 and 32. Accordingly, the basis of the rejection is confusing and improper and the Examiner is requested to withdraw the rejection and afford the Applicant a fair opportunity to respond to a proper rejection.

For the record, neither Gillick et al. nor Logan et al. teach the use of touch pads in a cavity opening formed in a sidewall of a keyboard housing.

It is also noted that claim 18 is drawn to an “auxiliary computer keyboard”, which is not disclosed by Collas et al. or Logan et al. The Collas et al. invention is drawn to laptop computers and does not meet the claimed limitation of an auxiliary computer keyboard. The Collas et al. reference actually teaches using a joystick – not a touch pad (see Abstract; column 3, lines 3-10).

The Logan et al. reference, likewise, does not teach an auxiliary computer keyboard.

The Chiang reference teaches an auxiliary computer keyboard with a two dimensional actuator for generating direction signals which can be used to move a cursor shown on a screen to a target position (see Abstract; column 1, lines 5-10). Chiang discloses that *“it is a primary object to provide a keyboard with a two-dimensional actuator to generate the same signals as those generated by the four directional or control keys of a traditional numerical key pad so that the function of these keys can be performed by activating the actuator directly”* (see column 2, lines 9-14 and 60-65). Chiang also discusses at column 1, lines 43-51 that *“some keyboards contain a trackball, touch pad...which permits the user to move a pointer shown on the screen...However, the signals generated by such a pointing device and the way to use such a pointing device are quite different from the four direction keys or the four control keys of the numerical keypad...Besides, the signals generated by such a traditional pointing device are used to move a pointer displayed on a screen instead of moving a cursor or scrolling a screen, like the four direction keys or the four control keys.”* The Chiang activator 20 and switch 40 are used to generate signals into predefined

directional signals for moving a cursor to a target position or for performing “page up” or “page down” operations. Chiang does not teach a touch pad or a touch pad integrated into a cavity opening formed in a sidewall of a keyboard housing.

Accordingly, Chiang distinguishes a device different from the typical mouse or prior art pointing devices by the way the device is used, its design, its function, and the type of signals it generates. Further, the Chiang device performs only specific functions and does not function as a mouse.

The combination of Chiang, Logan et al., and Collas et al. do not teach:

- 1) a touch pad integrated into a sidewall cavity opening of said keyboard housing;
- 2) using a touch pad positioned in an auxiliary keyboard housing.

For these reasons, Applicant submits that the combination of Chiang, Logan et al., and Collas et al. do not suggest or make obvious the claimed subject matter of claim 18. Accordingly, the Examiner has not shown that the product of the combination of Chiang, Logan et al., and Collas et al. is structurally and functionally the same as Applicant’s claimed product and the Examiner is requested to withdraw this rejection and allow the claim.

• **Specifically regarding the rejection of claim 19:**

The Examiner indicates in the rejection “In reference to claims 18-20 and 32, teaches a system that resembles the claimed invention however he does not incorporate his invention into the sidewall of a keyboard.” It is not clear to Applicant to which reference(s) the Examiner is referring and what the references teach with respect to the claim limitations.

The Examiner also refers back to the rejection of claim 11 indicating “Much like the reasoning offered in the rejection of claim 11, placing the mouse buttons on the sidewall of a computer keyboard is also very customary in the art.” It is noted the Examiner using the combination of Logan et al. and Scholder et al. in view of Gillick et al. rejected claim 11. The basis of the rejection of claims 18-20 and 32 does not include Gillick et al. or Scholder et al. – only Chiang, Logan et al., and Collas et al. Further, claim 11 depends

from claim 6, while claims 18-20 depend from claim 13 and claim 32 depends from claim 6.

It is further noted that the Examiner has not provided an obvious statement for using Chiang, Logan et al., and Collas et al. to reject claims 18-20 and 32. Accordingly, the basis of the rejection is confusing and improper and the Examiner is requested to withdraw the rejection and afford the Applicant a fair opportunity to respond to a proper rejection.

For the record, neither Gillick et al. nor Logan et al. teach the use of mechanical mouse buttons in a cavity opening formed in a sidewall of a keyboard housing.

It is noted that claim 19 is drawn to an auxiliary computer keyboard having at least one mechanical mouse button integrated into a cavity opening formed in a sidewall of said keyboard housing which is not disclosed by either the Collas et al. reference or the Logan et al. reference. The Collas et al. invention is drawn to a laptop computer and does not meet the claimed limitations of an auxiliary computer keyboard. Additionally, claim 19 depends from claim 13 which claims a touch pad mounted in said auxiliary keyboard housing. Neither the Collas et al. reference nor the Logan et al. reference teaches touch pads or using touch pads in an auxiliary keyboard housing. Further, the Collas et al. reference actually teaches using a joystick – not a touch pad (see Abstract; column 3, lines 3-10).

The Logan et al. reference, likewise, does not teach an auxiliary computer keyboard.

The Chiang reference teaches an auxiliary computer keyboard with a two dimensional actuator for generating direction signals which can be used to move a cursor shown on a screen to a target position (see Abstract; column 1, lines 5-10). Chiang discloses that *“it is a primary object to provide a keyboard with a two-dimensional actuator to generate the same signals as those generated by the four directional or control keys of a traditional numerical key pad so that the function of these keys can be performed by activating the actuator directly”* (see column 2, lines 9-14 and 60-65). Chiang also discusses at column 1, lines 43-51 that *“some keyboards contain*

a trackball, touch pad...which permits the user to move a pointer shown on the screen...However, the signals generated by such a pointing device and the way to use such a pointing device are quite different from the four direction keys or the four control keys of the numerical keypad...Besides, the signals generated by such a traditional pointing device are used to move a pointer displayed on a screen instead of moving a cursor or scrolling a screen, like the four direction keys or the four control keys.” The Chiang activator 20 and switch 40 are used to generate signals into predefined directional signals for moving a cursor to a target position or for performing “page up” or “page down” operations. Chiang does not teach a mechanical mouse button integrated into a cavity opening formed in a sidewall of said keyboard housing.

Accordingly, Chiang distinguishes a device different from the typical mouse or prior art pointing devices by way the device is used, its design, its function, and the signals it generates. Further, the Chiang device performs only specific functions and does not function as a mouse. The combination of Chiang, Logan et al., and Collas do not teach:

- 1) a mechanical mouse button integrated into a sidewall cavity opening of a keyboard housing;
- 2) the mechanical mouse button is capable of independent movement relative to said auxiliary keyboard housing.

For these reasons, Applicant submits that the combination of Chiang, Logan et al., and Collas et al. do not suggest or make obvious the claimed subject matter of claim 19. Accordingly, the Examiner has not shown that the product of the combination of Chiang, Logan et al., and Collas et al. is structurally and functionally the same as Applicant’s claimed product and the Examiner is requested to withdraw this rejection and allow the claim.

• **Specifically regarding the rejection of claim 20:**

The Examiner indicates in the rejection “In reference to claims 18-20 and 32, teaches a system that resembles the claimed invention however he does not incorporate his invention into the sidewall of a keyboard.” It is not clear

to Applicant to which reference(s) the Examiner is referring and what the references teach with respect to the claim limitations.

The Examiner also refers back to the rejection of claim 11 indicating *“Much like the reasoning offered in the rejection of claim 11, placing the mouse buttons on the sidewall of a computer keyboard is also very customary in the art.”* It is noted the Examiner using the combination of Logan et al. and Scholder et al. in view of Gillick et al. rejected claim 11. The basis of the rejection of claims 18-20 and 32 does not include Gillick et al. or Scholder et al. – only Chiang, Logan et al., and Collas et al. Further, claim 11 depends from claim 6, while claims 18-20 depend from claim 13 and claim 32 depends from claim 6.

It is further noted that the Examiner has not provided an obvious statement for using Chiang, Logan et al., and Collas et al. to reject claims 18-20 and 32. Accordingly, the basis of the rejection is confusing and improper and the Examiner is requested to withdraw the rejection and afford the Applicant a fair opportunity to respond to a proper rejection.

It is noted that claim 20 is drawn to an auxiliary computer keyboard, which is not disclosed by either Collas et al. or Logan et al.. The Collas et al. invention is drawn to a laptop computer and does not meet the claimed limitations of an auxiliary computer keyboard. Additionally, claim 20 depends from claim 13 which claims a touch pad positioned in the keyboard housing. Neither the Collas et al. reference nor the Logan et al. reference teaches using touch pads in an auxiliary keyboard housing. Collas et al. actually teaches using a joystick – not a touch pad (see Abstract; column 3, lines 3-10).

The Logan et al. reference, likewise, does not teach an auxiliary computer keyboard.

The Chiang reference teaches an auxiliary computer keyboard with a two dimensional actuator for generating direction signals which can be used to move a cursor shown on a screen to a target position (see Abstract; column 1, lines 5-10). Chiang discloses that *“it is a primary object to provide a keyboard with a two-dimensional actuator to generate the same signals as*

those generated by the four directional or control keys of a traditional numerical key pad so that the function of these keys can be performed by activating the actuator directly” (see column 2, lines 9-14 and 60-65). Chiang also discusses at column 1, lines 43-51 that *“some keyboards contain a trackball, touch pad...which permits the user to move a pointer shown on the screen...However, the signals generated by such a pointing device and the way to use such a pointing device are quite different from the four direction keys or the four control keys of the numerical keypad...Besides, the signals generated by such a traditional pointing device are used to move a pointer displayed on a screen instead of moving a cursor or scrolling a screen, like the four direction keys or the four control keys.”* The Chiang activator 20 and switch 40 are used to generate signals into predefined directional signals for moving a cursor to a target position or for performing “page up” or “page down” operations. Chiang does not teach use of a touch pad in a keyboard housing.

Chiang also does not describe or show a finger-pressing device formed on a mechanical mouse button. In fact, Chiang does not describe a mechanical mouse button.

Accordingly, Chiang distinguishes a device different from the typical mouse or prior art pointing devices by way the device is used, its design, its function, and the signals it generates. Further, the Chiang device performs only specific functions and does not function as a mouse.

Also, claim 20 recites the limitation of **a mechanical mouse button having at least one finger-pressing device formed thereon for application of pressure for causing movement of said at least one mechanical mouse button.** Applicant recognizes that continued pressure applied to a touch pad results in damage and has provided finger-pressing devices when applying pressure to the mouse buttons.

There is no disclosure in the Chiang, Collas et al., or Logan et al. references of providing mouse buttons having finger-pressing devices for application of pressure for causing movement of a mechanical mouse button.

The combination of Chiang, Logan et al., and Collas et al. do not teach:

- 1) an auxiliary keyboard housing having a touch pad mounted in said housing.
- 2) a mechanical mouse button movably mounted in said keyboard housing having a finger-pressing device formed thereon.

It is noted that the Examiner has not provided an obvious statement for using Chiang, Logan et al., and Collas et al. to reject claim 20.

For these reasons, Applicant submits that the Chiang, Logan et al., and Collas et al. references, either alone or in combination, do not suggest or make obvious the claimed limitations of claim 20. Accordingly, the Examiner has not shown that the product of the combination of Chiang, Collas et al., and Logan et al. is structurally and functionally the same as Applicant's claimed product and the Examiner is requested to withdraw this rejection and allow the claim.

• **Specifically regarding the rejection of claim 32:**

The Examiner rejected dependent claim 32 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,973,622 to Chiang in view of Logan et al. U.S. Patent 5,327,161 and further in view of U.S. Patent 5,473,347 to Collas et al. It is noted, however, that claim 32 depends from claim 6, which was rejected by the Examiner using U.S. Patent 5,327,161 to Logan et al. and U.S. Patent 5,805,144 to Scholder et al. The prior art rejection is unclear when the Examiner rejects claim 6 using Logan et al. and Scholder et al. and then rejects dependent claim 32 using Chiang in view of Logan et al. and further in view of Collas et al. Accordingly, the basis of the rejection is improper and confusing and the Examiner is requested to withdraw the rejection and afford the Applicant a fair opportunity to respond to a proper rejection.

It is noted that claim 32 is drawn to an auxiliary computer keyboard, which is not disclosed by either the Collas et al. reference or the Logan et al. reference. The Collas et al. invention is drawn to a laptop computer and does not meet the claimed limitations as recited in claim 32. Note that claim 32 recites that the keyboard housing is separate from the central processing unit housing. Neither the Logan et al. reference nor the Collas et al.

reference addresses or meets this limitation. The Collas et al. reference is a laptop computer wherein the keyboard housing and the central processing unit housing are the same. The Logan et al. reference is drawn to a touch pad device 20 and does not address the claimed limitation of a keyboard housing, or any type of housing. Accordingly, neither the Logan et al. reference nor the Collas et al. reference teach a keyboard housing that is separate from the central processing unit housing.

The Chiang reference teaches an auxiliary computer keyboard with a two dimensional actuator for generating direction signals which can be used to move a cursor shown on a screen to a target position (see Abstract; column 1, lines 5-10). Chiang discloses that *“it is a primary object to provide a keyboard with a two-dimensional actuator to generate the same signals as those generated by the four directional or control keys of a traditional numerical key pad so that the function of these keys can be performed by activating the actuator directly”* (see column 2, lines 9-14 and 60-65). Chiang also discusses at column 1, lines 43-51 that *“some keyboards contain a trackball, touch pad...which permits the user to move a pointer shown on the screen...However, the signals generated by such a pointing device and the way to use such a pointing device are quite different from the four direction keys or the four control keys of the numerical keypad...Besides, the signals generated by such a traditional pointing device are used to move a pointer displayed on a screen instead of moving a cursor or scrolling a screen, like the four direction keys or the four control keys.”* The Chiang activator 20 and switch 40 are used to generate signals into predefined directional signals for moving a cursor to a target position or for performing “page up” or “page down” operations. Chiang does not teach a touch pad or a touch pad integrated into a keyboard housing.

Accordingly, Chiang distinguishes a device different from the typical mouse or prior art pointing devices by the way the device is used, its design, its function, and the signals generated. Further, the Chiang device performs only specific functions and does not function as a mouse.

The combination of Chiang, Logan et al., and Collas et al. do not teach:

- 1) an auxiliary keyboard housing having a touch pad mounted in said housing.
- 2) a mechanical mouse button capable of independent movement relative to said mouse housing to invoke a highlighting mode.

For these reasons, Applicant submits that the combination of Chiang, Logan et al., and Collas et al. do not suggest or make obvious the claimed subject matter of claim 32. Accordingly, the Examiner has not shown that the product of the combination of Chiang, Collas et al., and Logan et al. is structurally and functionally the same as Applicant's claimed product and the Examiner is requested to withdraw this rejection and allow the claim.

Additionally, claim 32 depends from claim 6, which is drawn to a computer mouse housing supporting at least one mechanical mouse button, and at least one touch pad, said mechanical mouse button being movably mounted within said mouse housing and capable of independent movement relative to said mouse housing to invoke a highlighting mode without physical movement of said mouse housing. None of the Chiang, Collas et al., or Logan et al. references teaches touch pads or using touch pads with an auxiliary keyboard. Nor do the references teach a touch pad positioned in the auxiliary computer keyboard housing.

It is noted that the Examiner has not provided an obvious statement for using Chiang and Logan et al. in view of Collas et al. to reject claim 32.

For these reasons, Applicant submits that the references of Chiang, Logan et al. and Collas et al., either alone or in combination, do not suggest or make obvious the claimed subject matter of claim 32. Accordingly, the Examiner has not shown that the product of the combination of Chiang, Logan et al., and Collas et al. is structurally and functionally the same as Applicant's claimed product and the Examiner is requested to withdraw this rejection and allow the claim.

5. Claim 23 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Logan et al. U.S. Patent No. 5,327,161 the combination of U.S. Patent 5,936,555 to Zagnoev.

• **Specifically regarding the rejection of claim23:**

The Examiner rejected dependent claim 23 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,327,161 to Logan et al. and U.S Patent 5,936,555 to Zagnoev. It is noted, however, that claim 23 depends from claim 6, which was rejected by the Examiner using U.S Patent 5,327,161 to Logan et al. and U.S Patent 5,805,144 to Scholder et al. The prior art rejection is unclear when the Examiner rejects claim 6 using Logan et al. and Scholder et al. and then rejects dependent claim 23 using Logan et al. and Zagnoev.

The limitations of claim 23 recite, **wherein said computer mouse housing is an auxiliary computer keyboard housing.**

Additionally, claim 6, from which claim 23 depends, recites **wherein said auxiliary computer mouse comprises a computer mouse housing supporting at least one mechanical mouse button, and at least one touch pad, said mechanical mouse button being movably mounted within said mouse housing and capable of independent movement relative to said mouse housing to invoke a highlighting mode without physical movement of said mouse housing.**

The Examiner has indicated that *“Logan et al. do not teach the incorporation of the mouse into a computer keyboard.”*

The Examiner cites Zagnoev as teaching a mouse embedded in an auxiliary keyboard. The Examiner further indicates, *“It would have been obvious to one skilled in the art to add a mouse into a keyboard because of its extreme conventionality and the added value of space-saving and convenience factors.”*

However, it is unclear to Applicant which reference cited by the Examiner is being modified. The basis of the rejection is Logan et al. in view of Zagnoev. However, it appears that Zagnoev is being modified in the rejection. Further, the basis of the rejection is improper. In any event, it is noted that Zagnoev does not teach using touch pads.

The Zagnoev reference is drawn to a combined keyboard, consisting of two keyboard parts, and a pointing system. One of the two keyboards is adapted to be gripped by one hand of a user and be moved on support surface as a mobile keyboard part to generate pointing movement commands to cause movement of a pointing member on the computer (see Abstract; column 2, lines 5-12; column 3, lines 15-35; column 4, lines 20-25; column 5, lines 17-25).

In contrast, the keyboard of Applicant's claims 6 and 23 does not depend on physical movement on a support surface to generate pointing movement commands or to invoke a highlighting mode. Pointing operations of Applicant's invention are caused by use of a touch pad integrated in a wall cavity of the keyboard. Use of a touch pad in Zagnoev would destroy the invention of Zagnoev, because Zagnoev's invention is centered on keyboard movement.

Additionally, there is no touch pad taught by the Zagnoev reference. Nor, would there be a reason to include a touch pad in the Zagnoev reference.

Claim 6 and 23 together recite that the mechanical mouse button is movably mounted in said keyboard housing and is capable of independent movement relative to said keyboard housing to invoke a highlighting mode without physical movement of said keyboard housing.

The entire Logan et al. touch pad device 20 must be moved to invoke dragging. The Logan et al. reference does not teach a keyboard housing wherein a mechanical mouse button is moved relative to a keyboard housing. Accordingly, the Logan et al. reference does not teach the claimed limitations.

Therefore, it would not have been obvious to have modified Zagnoev to include a touch pad because:

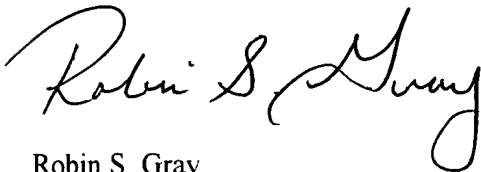
- 1) Zagnoev uses a computer keyboard that is moved on a support surface to generate pointing movement commands, which is completely opposite of Applicant's claimed invention of claims 6 and 23.
- 2) Zagnoev nor Logan et al. teach an auxiliary keyboard having a touch pad positioned in the keyboard housing.

- 3) Logan et al. do not teach using a touch pad used through an auxiliary computer keyboard.
- 4) Logan et al. *do not teach* a mouse housing structure. Applicant's claim recites **a mouse housing supporting at least one mechanical mouse button and at least one touch pad**. The Logan et al. reference is deficient because it does not teach a housing structure for supporting at least one mechanical mouse button and at least one touch pad – accordingly there is no housing structure for movably mounting the mechanical mouse button or placement of a touch pad, as claimed by Applicant.

For these reasons, Applicant submits that the combination of Logan et al. and Zagnoev does not suggest or make obvious the claimed subject matter of claim 23. Accordingly, the Examiner has not shown that the product of the combination of Logan et al. and Zagnoev is structurally and functionally the same as Applicant's claimed product and the Examiner is requested to withdraw this rejection and allow the claim.

Applicant respectfully submits that the above arguments place the application for patent in condition for allowance and early notification to that effect is respectfully requested.

Respectfully submitted,



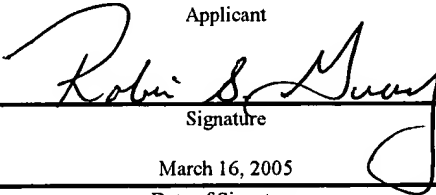
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Robin S. Gray

Applicant



Signature

March 16, 2005

Date of Signature